

APPENDIX G

IMPROVEMENTS INCORPORATED INTO THE SFWMM V5.5

The following list represents major included in SFWMM v5.5 since v3.5 (April, 1999)

- Simulation period extended from 31 years (1965-1995) to 36 years (1965-2000)
- S12 A, B, C and D structures are simulated separately
- Time dependent (calendar based) minimum threshold (instead of fixed value) for delivering water from Lake Okeechobee to meet Caloosahatchee and St. Lucie estuarine demands
- Update of modified delta storage based on new S236 basin demand and runoff and the S-4 basin demand time series
- BMP makeup water and regulatory discharge from Lake Okeechobee to the WCAs are subject to high water constraints in WCA canals
- Full implementation of WSE operational schedule for Lake Okeechobee
- Miscellaneous operational modifications for structures or gages
- Able to simulate canal drawdown during anticipated storms
- Ability to send ASR recovery water directly to grid cells
- Ability to simulate SSM as per Water Shortage Rules 40E-21/40E-22
- Modifications to the way 298 Districts runoff is handled in LOSA
- Added generic code so as to provide increased flexibility in modeling of scenarios.
- Ability to run model in continuous (used for long-term planning) mode or position analysis mode
- Enhanced model to do forward pumping (in addition to gravity flow) through S354, S351 and S352 when Lake Okeechobee is sufficiently low
- Deviations from Lake Okeechobee operational schedule (e.g. drought conditions) can be specified
- Ability to send Lake Okeechobee regulatory discharge to LEC tidewater even if WCAs are below schedule
- Days of week specification for Lake Okeechobee WS deliveries to EAA and LEC
- SFWMM v5.5 compares against NSM v4.6 and NMS v4.6.2 (earlier versions typically

compared against NSM v4.5)

- Included separate Lake Istokpoga demands and runoff time series
- Slope of water surface along selected canals can vary daily
- Operational modifications to several structures to better match structure operational rules
- Small reservoirs can be modeled within and across cells as independent entities
- Calendar-based WCA floor elevations
- Tidal Creek flows from ENP to Whitewater Bay and Florida Bay are explicitly simulated
- v5.5 based on v5.4 SFWMM calibration